

### **AMENDMENTS TO THE CLAIMS**

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

#### **Listing of Claims**

1. (Previously presented) A method comprising:
  - a) placing a plurality of labeled proteins, polypeptides or peptides in a plurality of chambers, such that different chambers contain a different type of labeled amino acid;
  - b) passing the labeled proteins, polypeptides or peptides through one or more nanopores, an inner surface of the nanopores coated with a semiconductor material;
  - c) detecting labeled amino acid residues in the labeled proteins, polypeptides or peptides;
  - d) compiling an amino acid distance map for each type of labeled amino acid;and
  - e) identifying the protein based on the distance maps.
2. (Currently amended) The method of claim 1, further comprising:
  - a) placing a template nucleic acid into each chamber; and
  - b) producing the one or more labeled proteins, polypeptides or peptides encoded by the template nucleic acid.